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## Facing the Future in St. Bernard Parish, Louisiana: Planning and Development

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FACING THE FUTURE IN ST. BERNARD PARISH, LOUISIANA:  
PLANNING AND DEVELOPMENT

A Thesis

Submitted to the Graduate Faculty of the

University of New Orleans

In partial fulfillment of the

Requirements for the degree of

Master of Science in Urban Studies

In

The School of Urban and Regional Studies

by

Gregory L. Chase

Bachelor of General Studies  
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## Abstract

During the past four decades St. Bernard Parish has undergone a transition from rural, agrarian characteristics to that of a suburban, industrial based community. This transition can best be understood by examining St. Bernard's history, its land and its people.

St. Bernard Parish is a fragile environment that is being ever changed by man and nature. Because of the practices of the past, the environment has been substantially altered by man's varied use of it. Strategies need to be developed to address the stress placed on the environment by these alterations, if development in the area is to continue.

The people of St. Bernard are faced with a changing economic base within the parish. Declines in the local industrial base may force increasing numbers of parish residents to seek employment outside of the parish, unless new forms of economic development are established to create jobs to replace those that have been lost.

Strategies in the form of economic development appear to be a course of action that must be developed and implemented if the parish is to avoid further economic hardship.

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## CHAPTER I

### INTRODUCTION

#### Purpose and Scope of the Study

The purpose of this thesis is to describe the development of St. Bernard Parish, discuss present problems and present possible courses of action to be taken to alleviate these problems.

By focusing on the major issues facing the area and how they may be addressed, the thesis attempts to determine what St. Bernard will be as a place to live and work in the near future.

#### Statement of the Problem

Over the past half century, St. Bernard has grown and developed from a rural to an urban community. The changes which occurred in this growth period included residential, industrial and economic development and other events which affected the fragile environmental balance of the area.

The process of unrestrained growth has created stress on a predominately wetland environment. The vast wetlands which comprise most of St. Bernard's land mass, have been often altered and abused by man causing the natural processes of deterioration to be

accelerated. Residential growth in the urbanized area of the parish has also created problems.

In recent years, the economy of St. Bernard Parish has undergone a transition. The economy, which was based largely on the industrial growth and development of the mid-twentieth century, declined due primarily to changing world economic conditions. This rapid industrial decline has created significant economic problems and turmoil in St. Bernard.

#### Need for the Study

These issues and others associated with them are the result of the processes of uncontrolled growth which has taken place in St. Bernard Parish in this century. They have created a need for the people of St. Bernard Parish to act and address these issues in order to determine their future. The choices made in the next several years will dictate what the St. Bernard of the future will be.



## CHAPTER II

## AN OVERVIEW OF ST. BERNARD PARISH

History

"St. Bernard Parish is a product of sediments deposited by the Mississippi River in several delta- building phases. Approximately 4,000 years ago, the Mississippi River began forming a delta in the St. Bernard Parish area, through the Bayou La Loutre channel." A second phase of delta building occurred in the Bayou Terre Aux Boeufs channel. It lasted approximately 500 years. A third phase began building land about 3,500 years ago through Bayou les Familles ending 1,500 years later. The last of the delta phases which built St. Bernard was Bayou Sauvage which continued until 700 years ago. The river gradually shifted its course and sediment distribution until it completely abandoned the St. Bernard area. Gradually the delta shifted to its Plaquemines-Modern delta complex of today. Some sedimentation continued to occur in the area due to periodic flooding of the river and its minor distributaries until settlement by man occurred in the area (Coastal Environments, Inc., 1976).

Man began to have his influence felt in the area in the eighteenth century. Early during this period,

the French colonized part of the area confined to individual plantations along the natural levee bordering the river.

After the transfer of the Louisiana territory from France to Spain, the Spanish began to colonize what is now lower St. Bernard parish. The Spanish, under Bernardo de Galvez, brought several hundred settlers from the Canary Islands. The center of the colony, on Bayou Terre Aux Boeufs was initially called New Galvez. The people of the colony changed its name to San Bernardo or Saint Bernard in honor of Galvez's name saint. At the same time, the Marigny de Mandeville was also bringing in colonists from the Canary Islands and settling them on his concession in St. Bernard. These settlers have come to be known as the Isleneos or Islanders. Additional settlement occurred later in this period when many French Acadian refugees settled in St. Bernard (Burk and Associates, 1979).

The area's soil, rich from many years of flooding, provided for excellent agricultural usage. The land produced as much as four crops per year. These crops included sugar cane, indigo and various vegetables. Throughout the later 1700's and into the early 1800's

the area became more densely settled and the richness of the fertile land was utilized more extensively by farmers.

The most historic event in St. Bernard's history occurred in January of 1815 in the area known as the plain of Chalmette, where the Battle of New Orleans took place. The great battle ended the rivalry between the United States and Great Britain for control of the lower Mississippi valley. Led at the site by their general and later president, Andrew Jackson, the American forces which totaled 2,500 men, defeated a substantially larger British force which had secretly advanced through Lake Borgne and the bayous of St. Bernard.

The parish of St. Bernard was officially designated just eight years before the Battle of New Orleans in 1807. The boundaries of the parish changed on seven occasions from its inception until it assumed its current boundaries in 1842 (Burk and Associates, 1979).

The character as well as the population of St. Bernard changed very little until the 1940's. The 1940 census showed an increase in population of 11.87 over the 1930 total to 7,280 persons in what was to mark the

beginning of the rural/suburban transition of the parish's character. Industrial development was coming to St. Bernard and with it a migration of people particularly from the city of New Orleans who were attracted to new jobs and new subdivisions that were beginning to develop in St. Bernard Parish.

In 1950 this trend continued as St. Bernard's population grew to 11,807, a 52.37 increase over the previous census. By 1960 St. Bernard had grown to 32,186, a 190.37 increase over 1950, the largest percentage population increase in the parish's history. The trend continued in 1970 when the population grew to 51,185. This represented a 59.27 increase in population over 1960. Census figures for 1980 put the population of St. Bernard Parish at 64,097, a 25.27 increase over the previous decade.

Historically, the economy of St. Bernard has been tied to the land and its unique environment until the mid-twentieth century. The plantations and farms that were developed along the rich soils that lined the banks of the Mississippi provided economic benefits to the parish's residents during the pre-industrial period.

St. Bernard's wetlands provided extensive economic

benefits through the fishing and trapping industries which thrived in the area. The wetlands also provided timber to the area due to the abundance of cypress trees found there. These trees were harvested and used in the construction of many houses in the New Orleans area in the 1800s and early 1900's.

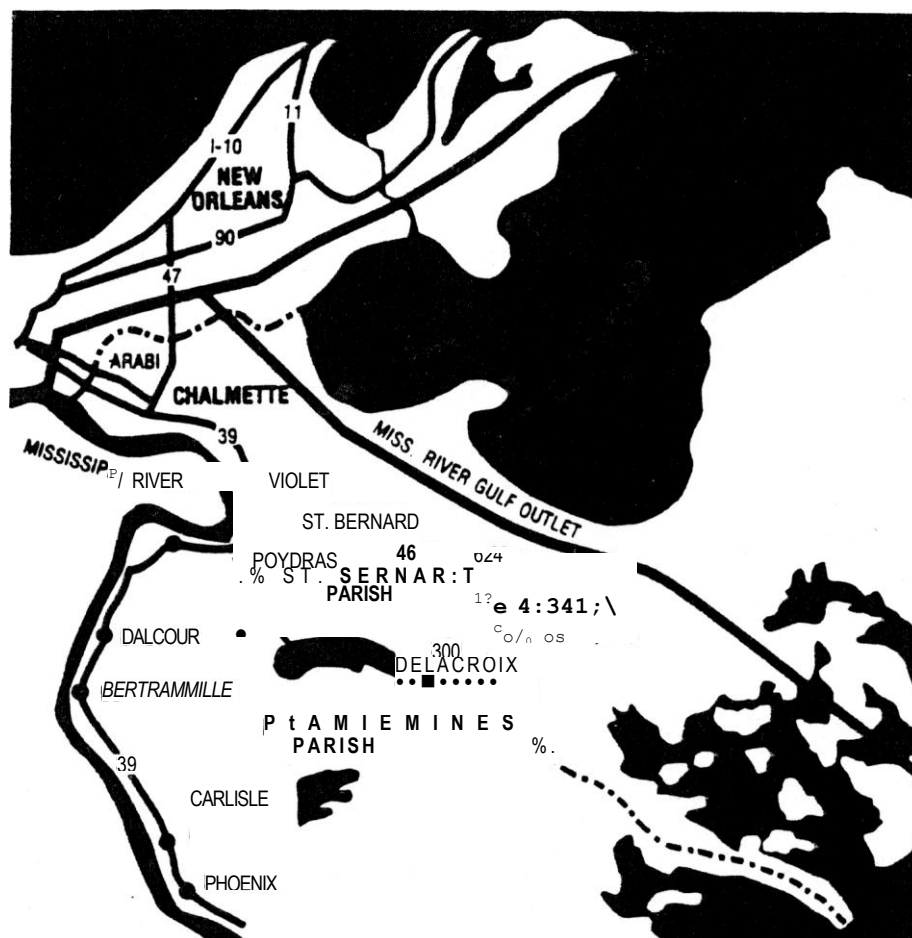
Since the 1940's, urbanization and industrialization have altered the area and its economy. The wetland areas have been altered by the activities of man which have resulted in the destruction of fresh water marshs which has impaired the production of fur-bearing animals. Many former farmlands have become subdivision developments of tract homes. Despite these changes, the environment still provides economic benefits. The seafood industry still provides all or part of the economic livelihood for many St. Bernardians in the lower portion of the parish.

The industrialization and urbanization began in earnest in St. Bernard in the 1940's and 1950's. Industrial development was along St. Bernard's portion of the east bank of the Mississippi where the American Sugar Refinery, Kaiser Aluminum's Chalmette Works and the Tenneco Oil Refinery were developed on the riverfront from the Orleans parish line in Arabi to

Chalmette. Other industrial developments in the area included the Murphy Oil Refinery, natural gas processing plants and ship building in the area between Meraux and Yscloskey.

The industrial developments, as well as the flight to suburbia by those who found St. Bernard an attractive alternative to life in the city, resulted in tremendous growth and expansion of the economic base of the parish. The population increase brought with it the development of the wholesale, retail and service sectors of the economy which were necessitated by the expansion. By the 1970's St. Bernard had transformed from a sleepy, rural area to an urban area not much different in character and appearance from the rest of the New Orleans area. As an extension of this growth, St. Bernard would come to share in the problems that urbanization brings particularly in light of its unique environment.

FIGURE 2.1

ST. BERNARD PARISH MAJOR COMMUNITIES  
AND HIGHWAYS

SOURCE: ST. BERNARD PARISH PLANNING COMMISSION

### Location and Access

St. Bernard Parish is located to the southeast of the city of New Orleans in southeastern Louisiana. It is bounded by the City of New Orleans to the north, Lake Borgne and Chandeleur Sound to the east, Breton Sound to the south and Plaquemines Parish and the Mississippi River to the west.

St. Bernard Parish is accessible by both land and water. Three major roadways provide access to St. Bernard. Louisiana Highway #46 (St. Bernard Highway) runs from the lower end of St. Bernard Parish to Center Street in Arabi where it becomes St. Claude Avenue and continues into the city of New Orleans. Louisiana Highway #39 (Judge Perez Drive) is the continuation of North Claiborne Avenue in Orleans Parish. It begins at the border of the two parishes and runs past Violet, Louisiana where it intersects with St. Bernard Highway. Both Judge Perez Drive and St. Bernard Highway provide links to the central business district of New Orleans. Louisiana Highway #47 (Paris Road) provides access to the eastern portion of New Orleans and to Interstate 10. Highway #39 also provides linkage with Interstate 10. (Urban Systems Associates, 1980).



Water bodies are also important as transportation modes. Large volumes of marine and shipping traffic pass through the roughly ten miles of St. Bernard which serve as the east bank of the Mississippi River below New Orleans. The Chalmette Slip provides port access in the area to some of these large ocean-going vessels. The manmade Mississippi River Gulf Outlet provides an alternate access route to shipping between the Gulf of Mexico and the Port of New Orleans.

St. Bernard is also served by rail as a mode of transit of goods. The Southern Railways tracks extend along St. Bernard Highway and into Plaquemines Parish.

#### The Environment and Its Utilization

St. Bernard has one of the largest land areas of any parish in Louisiana, with 1,527,201 acres. Nearly 987 of this area is comprised of wetlands and water- bodies. The urbanized area, where a majority of the parish's population resides, makes up only 2.67 of the total acreage.

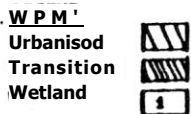
"The urbanized zone occurs within the man-made levee system between Arabi, Louisiana (Orleans Parish line) and Poydras, Louisiana. The levee system acts as a physical boundary and serves to define areas of existing and potential development. Approximately 887

ST. BERNARD PARISH BASE MAP



SOURCE: COASTAL ENVIRONMENTS, INC., 1977

## EXISTING LAND USE IN ST. BERNARD PARISH



SOURCE: BURK AND ASSOCIATES, INC. 1979

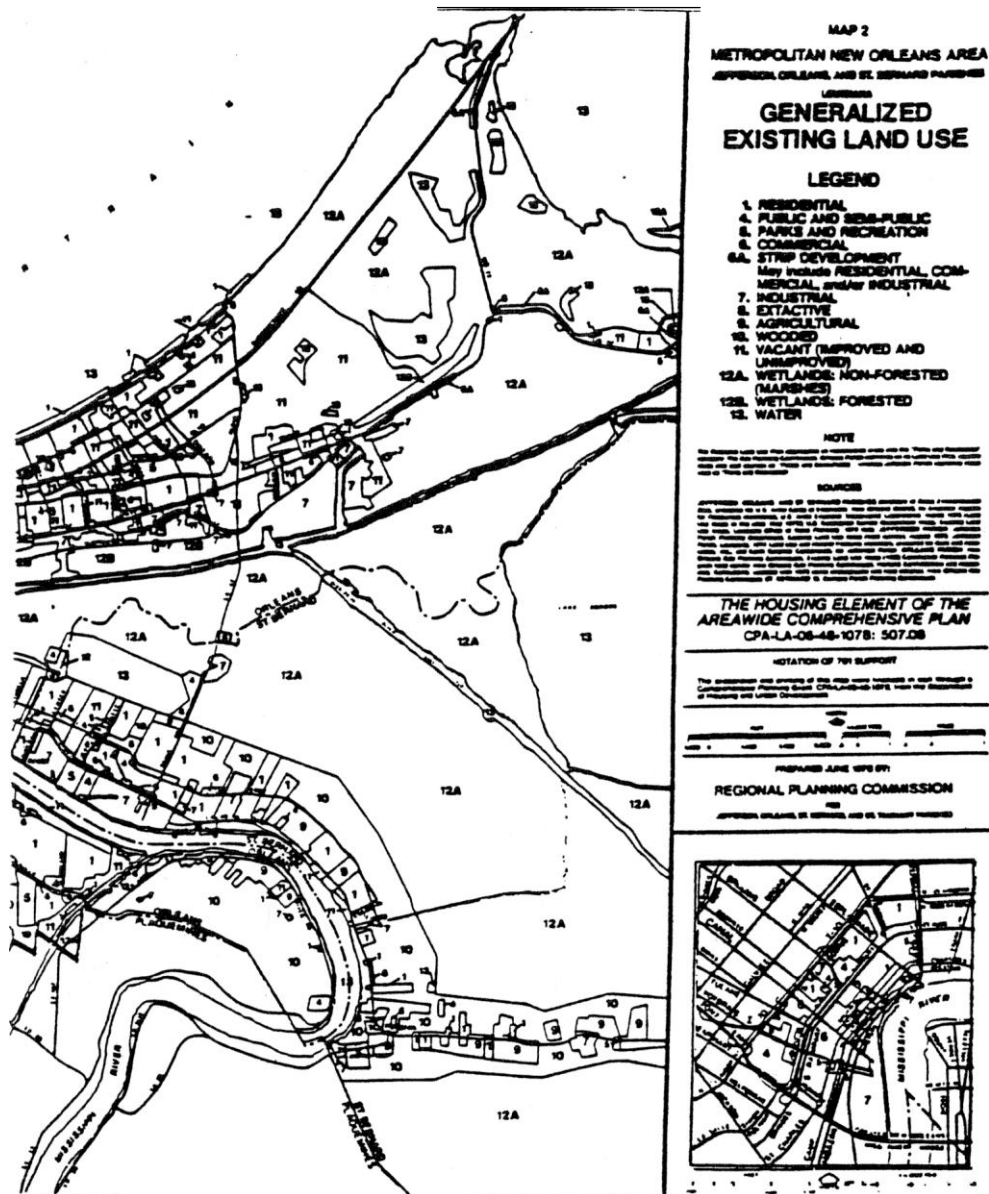
of the parish's population resides within the leveed area. The characteristics of the urbanized zone are similar to those of the newly-developed sections of New Orleans and Jefferson Parish and in this sense can be perceived as being tied to the New Orleans urban core (Burk and Associates, 1979)."

Most of the industrial activity within the parish occurs in the urbanized area between the Mississippi River from the Orleans Parish line to the Plaquemines border at Caernarvon. St. Bernard has approximately ten miles of river frontage in this area where the focus of the parish's industrial economy is located.

The major commercial development in the parish occurs along Judge Perez Drive, St. Bernard Highway and Paris Road in Chalmette and Arabi. Less dense commercial development also occurs in Meraux and Violet. It is found mainly in the form of strip commercial development.

Most of the land developed for residential uses in the urbanized zone is found in the form of single-family residences. High density development principally occurs in the Village Square area adjacent to West Judge Perez in Chalmette. Other small areas scattered within St. Bernard contain multiple family

FIGURE 2.4  
GENERALIZED EXISTING LAND USE  
URBAN ST. BERNARD



SOURCE: REGIONAL PLANNING COMMISSION 1978

dwellings, most commonly in the form of duplexes.

Substantial residential development is found in the area from Meraux to Poydras, largely in the form of single-family dwellings. Multi-family residential development also exists in the area but to a lesser extent.

A transitional zone exists between Poydras and Verret, Louisiana and the levee ridges running from Verret to Delacroix Island and Hopedale, Louisiana. Land usage in this area is principally low-density residential and commercial development. Some industrial usage is found in this zone in the form of natural gas processing plants found in Toca and Yscloskey. Several other unincorporated areas such as Shell Beach are found in this area. The area along Louisiana Highway 300 to Delacroix Island is also part of this zone. The transitional zone is found along a narrow band of land along the highways in this area.

The area's pattern of development below Verret is characterized by low density strip commercial and mostly residential uses adjacent to Highways 300 and 624 along Bayous La Loutre and Terre Aux Boeufs. The structures are generally elevated due to the lack of

protective levees in the area. This area, which is at the fringe of the parish's vast wetlands zone, serves as the point of access to the natural resources found there. As such, most of the fishing and marine activities in the parish have their origin in this area.

Commercial and sport fishermen as well as hunters make use of the area's abundance of seafood and wildlife resources. The area provides support services for these activities such as boat launches and other facilities which serve the fisheries and the oil and gas industry in the area.

The third zone consists of the remainder of the parish, the rich but volatile wetlands area, which comprises nearly 987 of its total land mass. The area is primarily marshland and water bodies and serves as a major economic and recreational resource for St. Bernard.

#### Socio-Economic Analysis

St. Bernard Parish is primarily a working class, blue collar community. Of its 1980 population of 64,097, approximately 967 of its inhabitants are Caucasian. This figure includes a small proportion of persons of Hispanic origin. Many of these individuals reside in the lower portion of the parish and are

TABLE 2.1  
1980 SOCIO ECONOMIC SUMMARY  
ST. BERNARD PARISH

Population	64,097 (96% white - 4% non-white)
Work Force	26,599
Median Income	\$18,882
Below Poverty Level Income	6.3% (% of Population)
High School Graduates	57.6% (% of Population)
4 or more years of College	5.6% (% of Population)

Source: U.S. Department of Commerce, Bureau of Census



descendants of the original settlers of the area, the Isleños. Blacks make up the remaining 470 of the population.

The median age of its residents is 28.4 years in 1980. Of persons twenty-five years or older, 57.67 are high school graduates and 5.6% have four or more years of college. These educational figures are below the average for the New Orleans area (U.S. Department of Commerce Bureau of Census 1982).

The median income of St. Bernard Parish is \$18,882 with 6.37 of its population falling below the poverty level. St. Bernard's "blue collar" predominance can be seen by analyzing its work force of 26,599 people. Of those individuals who reported their occupation in 1980, some 40.37 were involved in "blue collar" occupations. These included precision production, craft and repair occupations which account for 217 of the total, and operators, fabricators, and laborers which account for the remaining 19.37 of the total. Technical, sales and administrative support positions account for the next highest proportion with 35.87g. Management and professional persons make up 13.77 of the workforce. The remainder of the workforce is involved in service occupations (97) and farming, forestry and fishing

TABLE 2.2  
OCCUPATIONS OF WORKERS IN  
ST. BERNARD PARISH\*  
(1980)

<u>Occupation</u>	<u>1960%</u>	<u>1970%</u>	<u>1980%</u>
Management & professional	20.2	17.7	13.7
Technical, Sales & Administrative Support	27.4	29.3	35.8
Service Occupations	9.1	9.1	9.0
Farming, Forestry and Fishing		.0	1.0
Precision Production Craft and Repair Occupations	43.3	22.2	21.0
Operators, Fabricators and Laborers	7.5	21.4	19.3

\*Of workers who reported place of work

Source: U.S. Department of Commerce, Bureau of Census

TABLE 2.3  
PLACE OF WORK OF ST. BERNARD  
PARISH RESIDENTS

PLACE OF WORK (Parish)	1960%	1970%	1980%
Orleans	52.8	55.5	51.2
Jefferson	1.9	6.9	7.0
St. Bernard	42.5	34.8	36.8
Other:	4.1	2.6	5.0

Source: U.S. Department of Commerce, Bureau of Census

(17). The figure for the latter is deceiving since many parish residents engage in fishing as a source of income in addition to other occupations. These individuals are not reflected in these statistics, since many do not report such activities.

The majority (51.2%) of St. Bernard's workforce is employed in Orleans Parish. St. Bernard provides a place of employment for 36.87 of its residents. Of the remainder, 77 are employed in Jefferson Parish, and 5.07 outside of these areas.

As a means of transportation to these jobs, the majority of St. Bernard's workforce drives alone in their personal autos. Individuals who drive alone to work amount to 67.17 of the workforce. Of the remaining individuals 26.57 carpooled to work, 2.17 utilized public transportation and 4.37 used other means of transportation.

In terms of housing, the residents of St. Bernard are principally housed in owner occupied single-family dwellings. Single-family dwellings account for approximately eighty percent of the housing units in St. Bernard Parish. The area has the highest proportion of owner occupied dwellings in the New Orleans area with 73.47.

TABLE 2.4  
MEANS OF TRANSPORTATION TO WORK  
ST. BERNARD RESIDENTS  
(1980)

Drive Alone	67.17
Carpool	26.57
Public Transportation	2.17
Other Means	4.370

Source: U.S. Department of Commerce, Bureau of Census

Of St. Bernard's 21,453 housing units, the highest proportion, 31.17, was built during the 1970's. Housing constructed in the 1960's amounted to 28.57 of the total housing units in 1980. Houses constructed in the 1950's accounted for 22.67g. The forties produced 6.17 of the housing stock with the remaining 4.77, constructed prior to 1940. These figures parallel the population growth which grew steadily from the late 1940's and early 1950's to the late 1970's.

TABLE 2.5  
HOUSING CHARACTERISTICS  
(1980)

Total Housing Units	21,453
% Owner Occupied Dwellings of all Dwelling Units	73.47.

YEAR HOUSING STRUCTURES BUILT  
BY DECADE %

Prior to 1940	4.7%
1940 - 1949	6.1%
1950 - 1959	22.6%
1960 - 1969	28.5%
1970 - March 1980	38.1%

Source: U.S. Department of Commerce, Bureau of Census

## CHAPTER III

## CRITICAL ISSUES CONFRONTING ST. BERNARD PARISH

As St. Bernard moves into the mid-1980's it faces a transitional period that will shape its future in the coming years. These critical areas serve as the central issues of this transition. These issues are St. Bernard's changing environment, its accessibility to other areas of the region and the decline and transition of its economy.

Environmental Concerns

St. Bernard Parish exists in a volatile environment which has been altered and threatened by man's existence. The wetland area of St. Bernard amounts to 987 of St. Bernard's total area and is a major recreational and economic resource. Man's activities have altered the ecological balance of the natural environment as civilization moved into the area. Though many of the changes have been caused by man, the greatest change was the natural occurrence of the Mississippi River's abandonment of the St. Bernard Delta complex 700 years ago.

The wetland areas have been the site of increasing intrusion of saltwater, causing a change



in salinity of the marsh from a fresh to brackish state to a saline condition. Many areas of the back swamp in this zone are either dead or in an advanced state of deterioration. Many areas of land are also being reclaimed as water bodies by subsidence which is prevalent in the area. Also the loss of supplementary nutrients and alluvial sediments has led to a trend of more areas opening up into ponds and open water further increasing land loss.

Some of the changes in the area were from natural causes such as storm surges and subsidence. The principle changes, as previously noted, were caused by man. The leveeing of the Mississippi River during the eighteenth and nineteenth centuries contributed to the loss of much of the sediments and freshwater which replenished the area during periods when the river would overflow its banks. In addition, the dredging of various navigational, drainage and pipeline canals in the area has also contributed to the deterioration of the area. By far, the major cause of land loss and saltwater intrusion in the area was the construction of the Mississippi River Gulf Outlet (MRGO).

The MRGO is a 70-mile channel which runs from the Gulf of Mexico through St. Bernard Parish to the Intracoastal Waterway in Orleans Parish. The Intracoastal Waterway joins with the Mississippi River

thus making the MRGO an alternate navigational inlet to the port of New Orleans which was its purpose. The canal is an average of 70 feet across at its bottom and averages 36 feet in depth. It is of varying width throughout its length. The channel extends from the southeast, originating from the Intracoastal Waterway at Michoud through wetland areas bordering the south shore of Breton Sound, north of Breton Island. The MRGO was authorized by the River and Harbor Act of March 29, 1956. It was constructed during a four year period beginning March 17, 1958. The project was completed on January 22, 1965. With its construction, the MRGO replaced 1,680 acres of shallow open water and 4,868 acres of marsh along its 70 mile length. Its spoil areas, which are on the south bank of the channel, within containing dykes, cover 4,518 acres of open water and 12,540 acres of marsh. A total of 23,606 acres (36.9 square miles) of wetlands were thus removed from productivity (Coastal Environments Inc. 1973).

In addition, the MRGO serves as an inlet route into the wetlands of St. Bernard for large amounts of highly saline water. Monitoring of the area since the opening of the MRGO has shown a substantial increase in the salinity of water at stations located at Hopedale

and the Paris Road bridge indicating similar salinity increases in other areas also. The saltwater intrusion has also shifted the shoreline of Lake Borgne to the south bank of the MRGO. Areas of formerly fresh marsh have been reclassified as brackish to salt marsh due to changes in the vegetation in the area and salinity of the water as far inland as the area of Bayou Dupre (Coastal Environments Inc. 1973).

According to the Coastal Environment's MRGO study, salt-water intrusion into fresh and brackish marshes results in maximum loss of marsh area.

Thick sections of peat and highly organic clays have developed beneath the fresh and brackish marshes. This layer is subject to constant addition of organic litter and is held together by the plants root structure. The grasses which grow in saline water are not effective soil binders as grasses associated with fresh and brackish marsh water are. Thus, in cases where salinity is high, the marsh has a tendency to break up and become open ponds and lakes (Coastal Environments Inc. 1973).

Prior to the construction of the MRGO, the Central Wetlands were characterized by distinctive zones of fresh and brackish marshes which supported various

and back swamp. The New Orleans area is an area which 200 years ago was largely a "mosquito infested swamp." Man has drained and built up this "swamp" and with it has taken away much of its capacity to hold and drain storm water. Along with these changes, the last six years have brought large amounts of rainfall, during short periods of time, on three separate occasions. These rains have resulted in three "100 year floods" in a six year period.

Despite these conditions man has continued to develop the land. These floods serve as a warning that man must not exceed the land's bounds of development and inhabitation. These warnings need to be taken seriously. If St. Bernard desires to continue residential development it needs to pay the additional cost to improve its drainage or pay the cost of nature's wrath.

#### Accessibility As An Issue

The isolation of St. Bernard Parish from the rest of the metropolitan New Orleans area creates unique problems. St. Bernard's accessibility to the remainder of the metropolitan area is limited. All of the other parishes in the area are linked from east to west via I-10. St. Bernard lies south of this link. No such limited access expressway serves St. Bernard.

The people who travel to and from St. Bernard Parish either live, work or have some need to go there. There is no benefit of traffic passing through or having ready access to do business there. The distinction can be viewed in either a positive or negative context. Many residents see the isolation as one of the parish's major appeals. It limits growth and serves to buffer residents from characteristics of city life which they sought to escape from.

Isolation also serves to limit the potential for economic growth. Isolation restricts growth in the retail sector and related areas of the economy. This occurs because retailers in the area can only draw upon the relatively small St. Bernard area as a marketplace. Major retail developments in Orleans and Jefferson Parish are able to draw from the entire metro area because they are readily accessible to virtually all points within it. This isolation has also resulted in St. Bernard not benefiting from the growth of the tourism business, which has thrived not only in New Orleans, but in Jefferson and St. Tammany through the construction of new hotels in these areas. St. Bernard's location also serves to deter the wholesale distribution sectors from locating there because of

difficulty in accessing market areas.

#### A Changing Economy

Another major issue facing St. Bernard is the condition of its economy. Since 1981 several severe blows to the parish's economy have been felt. Layoffs at the Kaiser Aluminum Chalmette Works, St. Bernard's largest employer prior to 1981, resulted in a reduction in force at the plant from 2,700 in early 1981 to less than 100 in May of 1984. The layoffs were the result of increased energy costs and a depressed worldwide market for aluminum products.

Another major employer, Bergeron Industries, fell victim to the recessionary economic conditions of the early 1980's. The shutdown of Bergeron shipyard was due mainly to the decline of the offshore oil industry which it served. The closure resulted in the further loss of jobs and tax revenues in St. Bernard (St. Bernard Parish Planning Commission, 1984).

The combined effects of these events have resulted in record unemployment in St. Bernard Parish. It has shrunken the tax revenue of the parish government by reducing sales tax revenues, a key parish financial resource, according to parish Chief Administrative Officer and Planning Director David B. Farber. These

TABLE 3.1

UNEMPLOYMENT: ST. BERNARD PARISH				
	1/83	- 4/84*		
(7)	1981	1982	1983	1984
January	10.4	10.8	15.1	10.3
February	9.8	11.3	17.0	10.8
March	9.3	11.7	17.2	10.5
April	9.3	12.1	17.5	10.2
May	9.4	11.4	16.2	
June	10.4	11.5	15.9	
July	10.0	13.1	15.9	
August	10.0	12.8	15.3	
September	8.7	12.6	12.0	
October	8.9	12.6	12.0	
November	10.5	13.4	10.9	
December	10.1	14.1	10.4	

Source: Louisiana Department of Labor, 1984

\*Not adjusted for seasonal variance

TABLE 3.2  
UNEMPLOYMENT  
ST. BERNARD VERSUS NEW ORLEANS S.M.S.A.  
1980 - 1983

	ST. BERNARD	NEW ORLEANS S.M.S.A
1980	7.6%	5.9%
1981	9.7%	7.8%
1982	12.4%	9.3%
1983	14.6%	10.4%

Sources: Louisiana Department of Labor, 1984



revenue losses resulted in the layoff of over fifty parish workers, according to Farber. The buying power of the parish-at-large has been reduced effecting the entire economy.

The paramount issues facing St. Bernard as it moves into the mid and late 1980's are the management of growth and development to within the constraints of the environment; economic development and the creation of new jobs; improved accessibility; and the mitigation of environmental deterioration of the parish's wetlands. These issues must be addressed with urgency to determine the future of St. Bernard.

CHAPTER IV  
ADDRESSING THE CRITICAL ISSUES FACING  
ST. BERNARD PARISH

The Environment

As St. Bernard moves into the future, the maintenance of its environment as a home to its residents and as a productive environment is critical to its survival. During the 1970's St. Bernard began to undertake major efforts in an attempt to offset the deterioration of its wetland areas which has resulted from both natural and manmade changes in the environment. A variety of programs such as the Violet Freshwater Diversion Project (Violet Siphon), the St. Bernard Parish Coastal Zone Management Program, and the Wetlands Management Program was implemented with the aid of the federal government. These programs must continue to aid in preserving and enhancing St. Bernard's predominately wetland environment.

The Violet Siphon has provided the Central Wetlands area of St. Bernard with an intrusion of freshwater which has enhanced and restored large portions of the area which were in a process of transition and deterioration.

Since the siphon went into operation in early

1980, it has aided in counteracting intrusion that exists in the area. Many wetland areas in the zone that were formerly fresh to intermediate brackish marsh are regaining more of their original nature as a result of the siphon (Coastal Environments Inc., 1979).

Additional nutrients are being provided by the freshwater that is diverted into the area in addition to diluting water salinity. These actions will serve to benefit wildlife and marine species native to the area. Fur-bearing animals which inhabit the area should be expected to increase in population as the marsh progressively becomes less salinated. The area has in the past been one of the most productive areas of fur-bearing animals in the state. The decrease in salinity also has served to enhance certain marine species which require less saline environments for their existence.

The lower salinity also serves to enhance vegetation in the area. Three cornered grass which serves to hold soil together better than grasses common to marsh of more salinity are prominent in low saline marsh and should become prominent again as the amount of salinity decreases. The three cornered type grass supports a large population of fur-bearing animals. Cypress trees

in the marsh areas affected are also being aided by decreasing salinity thus retarding the processes which are killing off many of the trees in the Central Wetlands.

Economically, the siphon benefits the parish by increasing the productivity of the marshes, which have traditionally been important to the St. Bernard economy. The increase in fur-bearing animals will aid trappers, who rely on these animals for their livelihood. The seafood industry is also aided since the less saline environment aids the oyster population in the area by lessening the number of marine predators common to water of higher salinity.

The siphon benefits St. Bernard in many aspects, but it alone cannot solve the problems facing the wetland area within the parish. Progressive programs such as the Wetlands Management Program and the implementation of a Coastal Zone Management Plan are important to the maintenance and enhancement of St. Bernard's wetlands.

The St. Bernard Parish Coastal Zone Management Plan has developed plans, priorities and permit procedures consistent with state and federal regulations in implementing a Coastal Zone Management (CZM) Program

and establishing the St. Bernard Parish Coastal Zone Advisory Committee. The project has outlined program goals, structural and non-structural measures aimed at maintaining St. Bernard's marsh and wetland resources.

In conjunction with the CZM plan, St. Bernard's Wetlands Management Program has assisted in rehabilitating marsh and wetland areas by implementation of both structural and non-structural measures. Both of these programs were funded by the federal Coastal Energy Impact Program.

Plans are currently being considered for the construction of other freshwater diversion in the parish to further assist in reversing the current trend of increasing salinity and land loss in the wetlands area. The U.S. Army Corps of Engineers has recommended a site at Caernarvon, Louisiana.

In addition to these governmental programs, recent developments have brought the private sector into the effort to reverse the trend of wetland deterioration. The most recent example of the private sector's role is a mitigation agreement between Shell Oil Company and St. Bernard Parish. The mitigation process involves wetland improvement projects as repayment for disturbing wetland areas caused by construction projects.

In return for permission to install a twelve mile long, sixteen inch pipeline to carry Mississippi River water from the Poydras area to their natural gas processing plant in Yscloskey, Shell agreed to install water control structures in St. Bernard's Central Wetlands area. These structures, called flapgates, allow water levels to be drawn down allowing water from rainfall to pond over marsh during various times of the year, such as trapping and duck hunting seasons when the gates are closed. When the water is drawn down it allows vegetation that supports fur-bearing animals to grow. At other times in the year the gates will be opened to allow in salt water and with it fish, shrimp and other marine life into the area.

It can only be hoped that such efforts on the part of the public and private sector will continue in an effort to halt the devastation which has occurred in St. Bernard's wetland areas. These efforts may be the only means to preserve one of St. Bernard's most vital resources. (Times Picayune States Item 4/22/84)

Commitment to these programs must be maintained and expanded to preserve the unique environment of the St. Bernard wetlands. Most of the financial burden of supporting these governmental programs must shift to

local government due to the federal government budget cuts which have effected these important programs during the Reagan Administration. The state's current revenue problems also place an increasing burden on St. Bernard to fund these programs.

The environmental issue facing the urbanized portion of St. Bernard Parish is one of living within the land's capacity for development. From the 1940's through the early 1980's, St. Bernard, as well as the other parishes in the area, has allowed virtually unrestricted development in an area that was virtually a swampland less than three centuries ago and lies in large part below sea level. Only after nature had served notice to these facts in the form of torrential rains which have caused massive flooding from the period of the late 1970 to as recently as April of 1983, has the public become aware of overdevelopment as a problem created by ignorance of the environment.

The mistakes of this period need not re-occur. There is an immediate need to deal with the problems created during this period. Immediate action needs to be taken to bring St. Bernard's drainage capacity to a level which will meet the requirements of its stage of development. It is likely that the eventual settlement

of the federal lawsuit against the parish will force St. Bernard to improve its flood protection and drainage system to a standard set by the court.

According to David Farber, plans are currently being developed by drainage consultants to adequately meet St. Bernard flood protection requirements. Farber said that possible funding could be provided by a sales tax increase with a dedicated portion directed to drainage. Among the proposals under consideration is to develop large ponding areas in various locations to provide a place for storage and disposal of storm water runoff and to improve the current drainage infrastructure of canals and pumping stations (David B. Farber, Interview, May 1984).

This sales tax revenue may provide part of the revenue necessary for drainage improvements but it is likely that the residents of St. Bernard, particularly homeowners will need to bear a higher cost in the form of special taxation to bring drainage up to the required level. How much money will be necessary for these improvements cannot be ascertained until plans are more formalized. The time to begin to act on such measures is now, not after another major flood strikes the area. This condition requires St. Bernard to be



bold and decisive and is not without sacrifice to its people.

Until such time as improvements are made and the St. Bernard drainage system is brought up to an adequate level, careful consideration needs to be given to development in the area. The local government needs to heed the warnings of recent years by not repeating its error of allowing unrestricted development without adequate forethought. Development in the interim period until improvements are made should be limited to areas which are not highly susceptible to flooding.

The current economic conditions have served to restrain substantial new development. An improvement of economic conditions should not be cause for St. Bernard's public officials to lose sight of these problems,, although improved economic conditions provide benefits to the parish's economy through the vital construction industry. Farber feels that there is a delicate balance between the importance of the construction sector in the local economy and the need to keep development within the environment's capacity.

There is a need to move to expedite the improvement of the drainage system while in the interim to restrict development so that the already overburdened

flood protection system will not be pushed even further beyond its limits. A majority of the support for the badly-needed projects will have to come from the people of St. Bernard in the form of some type of tax program. Such additional expenses are an equitable tradeoff for the security which adequate flood protection through improved drainage would provide to St. Bernard residents.

#### The Economy

Just as the environment of St. Bernard is in a state of transition, so is its economy. The economic direction of St. Bernard needs to be reassessed to meet the challenges which await its economy in the coming years.

The economic changes which have taken place in St. Bernard during the last five years have been the result of short term economic conditions and the trend of transition of the national industrial base from "smoke stack" to "high tech" industries. St. Bernard may be in a position to capitalize on this transition due to a number of factors and characteristics it possesses. St. Bernard, by the nature of its location and environment, has perhaps the greatest potential for economic

development in the utilization of its frontage on the Mississippi River and the Mississippi River Gulf Outlet (MRGO) as a port and an industrial area. St. Bernard has approximately ten miles of frontage on the Mississippi River's east bank and approximately sixty miles of frontage on the Mississippi River Gulf Outlet. Large portions of these areas are undeveloped today.

In the early 1980s, the St. Bernard Port Harbor and Terminal District Commission was formed in an effort to plan and develop this area as the "new frontier" of the St. Bernard economy. The commission recently released its master plan which details its method for developing the area.

A January 1982 study conducted by the University of New Orleans Center for Economic Development for the Commission indicated that St. Bernard should be aware of its potential for such a development due to its prime location in Southeastern Louisiana. The area provides access to the river, the MRGO and other water-bodies such as the Intracoastal Waterway which allows the area to be accessible from many directions. In addition to the location factor, St. Bernard possesses the largest undeveloped area in the region that has potential for port development.

The UNO study indicated that the parish could take advantage of industry's move to the "Sunbelt". It pointed out that short-term economic conditions should not be a concern in plans for the port's development since long-term planning should override short-term concerns.

Developing the port in a location that is conducive to industrial relocation was addressed by the report as of the highest importance. Factors that were cited as important for consideration for industrial location in the area included geographic distribution to marketplace; an adequate transportation network; adequate amounts of quality labor; available utilities at a reasonable cost; and quality living conditions determined by such factors as housing, educational facilities, medical care, recreational facilities and shopping facilities.

In the short-term, it was suggested that target industries for the area would include warehousing and storage of various goods; assembly and light manufacturing and construction; repair and servicing of heavy machinery and waterborne transportation equipment, in addition to various other potential industries.

Before such an undertaking can begin many

considerations need to be addressed, such as seeking funding from public and private sources to develop these port facilities and to attract business to them. Perhaps the most important need to address in the short-term is improved access to the immediate market area for the industries that would be initially attracted to the area.

### Accessibility

The improved accessibility of St. Bernard Parish to the rest of the New Orleans metropolitan area is vital to the future economic development of St. Bernard. Businesses created by the port or businesses created from other sources of economic development will need to be less isolated and more readily accessible to their market place to be successful. Improved accessibility will also benefit St. Bernard commuters who have no limited access roadway to provide them with access to the rest of the New Orleans metropolitan area.

Plans are in existence for new roadways to meet St. Bernard's need for improved accessibility. The proposed Interstate 510 will provide the linkage of Paris Road from the bridge over the MRGO to Interstate 10 in eastern New Orleans. The link will be in the

form of a multi-lane, divided, limited access roadway. It will replace the current linkage which is provided by a dangerous narrow stretch of undivided two-lane roadway, which crosses railroad tracks and a dangerous intersection at Chef Menteur Highway.

The plan calls for a four-lane divided expressway between the Mississippi River Gulf Outlet Bridge and Lake Forest Boulevard and six lanes from Lake Forest Boulevard to the I-10 interchange. Interchanges are proposed at Almonaster Avenue and Chef Menteur Highway. According to Planning Director/CAO David Farber, it is hoped that the roadway will be completed by 1987.

Although the 1-510 link will be geographically contained in New Orleans it will have its greatest effect in St. Bernard. The roadway will provide more efficient access from St. Bernard to eastern New Orleans and to the major east to west transportation corridor in the area, I-10. The completion of this roadway is a prerequisite to the development of a successful port and industrial area on the MRGO. Construction of a roadway along the MRGO that links with Paris Road a part of the infrastructure of the port development will also be integral to the port's success.

Since the 1960's, plans have been developed for a limited access roadway that would link St. Bernard with the rest of the metropolitan New Orleans area. It would replace the deficient St. Claude-North Claiborne transportation corridor as St. Bernard's principal link to the area. It will also provide an alternative access to the port area.

The first plan for the limited access roadway known as the Trans City or Florida Expressway was developed in 1967. The plans for the highway have targeted it for development for the 1995 transit network as addressed in the recent New Orleans Region Transportation Study.

Plans call for the roadway to be approximately -- nine miles in length originating at Franklin Avenue at Interstate-10 and ending at a location at or near Parts Road within St. Bernard Parish. The road will follow a route along the current alignment of Florida Avenue in New Orleans (approximately 2.27 miles) and the Florida Walk Canal in St. Bernard Parish (approximately 6.81 miles). Within Orleans Parish the current Florida Avenue roadway will be widened from its present two lanes to four lanes and transposed into a limited access roadway. No existing roadway along the proposed

A high rise crossing of the Inner Harbor Navigational Canal will also be constructed to replace

The phase development of the project calls for initial construction to begin sometime in the late 80's on the section of the roadway from the Orleans/St. Bernard line to Paris Road. After the completion of the initial phase, plans call for the continuation of construction of the initial segment and the start of construction of the segment from Franklin Avenue to the St. Bernard Parish boundary. During this phase, the construction of the Industrial Canal crossing will occur. During the mid 1990's, the completion of the project from Franklin Avenue to the St. Bernard Parish line is projected. Construction will continue on the remaining segment of the roadway in St. Bernard Parish during the period. Completion time for the latter segment of the project cannot be projected at this time.

These projects are currently in the planning phase. Because of the critical importance of these



projects to plans for economic development, St. Bernard public officials, particularly its legislative delegation, need to increase lobbying efforts in both houses of the state legislature to push for expeditious action on these projects. Any further delays in their development could prove to be adverse to St. Bernard's economic future.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

St. Bernard Parish is an area which possesses a unique resource in its environment and a rich history in its people. Just as the conquest of the elements was necessary for the survival of its early settlers, St. Bernard must now overcome certain obstacles for its future survival.

St. Bernard must come into balance with nature. It must do so by controlling development to the limits of its environment in its urban areas. It must maximize the use of its resources without compromising further its environmental integrity while fully developing its economic potential. Controlled growth and economic development can co-exist within the environment's limits.

The efforts of programs such as Coastal Zone Management, the Wetlands Management Program, freshwater diversion projects and private efforts must be continued and expanded to mitigate losses of wetland areas. Although much of the losses of land in the area are created by natural processes of erosion and subsidence, losses created by man can be minimized by

Although St. Bernard has suffered economic losses and decline in the last three years, it too has the potential to mitigate these losses. St. Bernard's banks of the Mississippi River Gulf Outlet and its ten mile frontage on the east bank of the Mississippi River provide hope for its economic future. The development of the area by its newly formed port commission can serve as a catalyst to economic revitalization in the area.

Before this development can be undertaken a commitment must be made to funding for necessary infrastructure improvements to facilitate its development. If the port development plan is not realized it is likely that St. Bernard will become more of a "bedroom" community increasingly dependent upon the remainder of the New Orleans area as a source of employment for its people.

The future of St. Bernard parish depends largely upon the willingness of its people to begin to invest in the future in the form of increased taxation. These revenues need to be generated increasingly on the local level to deal with these local issues, especially since funds from federal and state sources have diminished.

Action or non-action on these issues will determine their outcome. Action will require financial commitment and sacrifice to support programs which have already begun through the aid of the Federal government particularly in environmental areas. No longer can the federal and state government be counted on to provide substantial support for these programs due to budget cuts and a decline in available funding from these sources.

Recommendations are forthcoming on the form drainage improvements should take. This will be perhaps the most costly problem St. Bernard must solve. However, the cost of non-action will be much greater. Total financial commitment by the people of St. Bernard to drainage improvements is essential for the continued growth of residential development. This could be provided through a property surcharge dedicated to drainage. If action is not taken to improve the drainage system residential development should be severely restricted. Failure to act on this issue will also undoubtedly result in future flood conditions in times of abnormal rainfall.

The plans for the port development should continue. Since they provide viable alternatives for

Future economic development the level of public support necessary through taxes will not be known until plans have progressed. Prior to the development of the port, improvements to the Accessibility of St. Bernard must occur to make the port viable. The construction of the roadways necessary for improved access can best be facilitated by extensive lobbying efforts aimed at the state legislature which controls funding for such projects. This can best be achieved by the Parish's legislative delegation and other local elected officials.

In summation, St. Bernard's future can best be served in learning from the errors of the past, emphasizing planning and arranging it's priorities to create an agenda for the future which provides economic development and controlled growth within the bounds of the environment.

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## VITA

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result of the 1978 and 1980 floods, a substantial amount of claims were paid out for flood related losses in St. Bernard Parish by the federal government under its National Flood Insurance Program (NFIP). Because of the substantial losses in St. Bernard and Jefferson Parish, a federal investigation looked into those Parish's enforcement of the program's regulations. In May of 1981, a suit was filed by the federal government to recover the claims for the damages that were paid out in the area as a result of these floods.

The suit was brought by the United States Department of Justice against the St. Bernard Parish Police Jury, Lake Borgne Basin Levee District and other defendants, principally builders and developers in the area. It charged willful and negligent failure to implement and enforce requirements for new construction and existing structures required by the National Flood Insurance Program (NFIP), which required the NFIP to pay insurance claims amounting to over \$17 million after the floods of May 1978 and April 1980. Similar flooding occurred in April of 1983 resulting in still more flood insurance claims by St. Bernard residents. The suit charged that the flooding damage and resultant claims were the direct and proximate result of the

willful and negligent acts and omissions of St. Bernard Parish and the other defendants.

The willful acts and omissions referred to in the suit concerned local ordinances required by the NFIP for participation by local areas which St. Bernard enacted, but failed to properly enforce or had delayed in implementing. As a result, large amounts of new construction and improvements to existing buildings were built below the 100 year flood level in violation by NFIP regulations for participation. Some structures were as much as three feet below sea level in the Buccaneer Villa North Development. In addition, the suit charged that the St. Bernard Parish Police Jury, the Lake Borgne Basin Levee District and the Louisiana Office of Public Works negligently breached their duty to properly maintain, inspect and repair levees, canals, culverts, ponding areas and other elements of the drainage system.

The suit seeks to order St. Bernard and the other governmental bodies involved to conform to the Justice Department's recommendations which would bring the drainage systems and any new construction into compliance with the NFIP and its regulations. The suit seeks to suspend the approval of all new subdivision

developments in flood prone areas until such requirements are met.

When and if the suit is settled in the favor of the Justice Department, the effect upon St. Bernard will be great. For these <sup>im</sup>provements to be implemented there is a likelihood that their cost could far surpass the \$17 million paid out in NFIP claims in St. Bernard in 1978 and 1980. In all probability the cost of these <sup>im</sup>provements would have to be borne by the people of St. Bernard in the form of additional taxes to be leveed in some form. This would come at a time when there is already economic distress in the community.

Restriction on new subdivision development as a result of the suit could damage the ailing construction industry even further in St. Bernard. This moratorium would also result in the loss of revenue to St. Bernard Parish due to a <sup>d</sup>iminished potential property tax base from prospective homeowners to the parish.

St. Bernard is not alone in the New Orleans area in facing growing drainage problems. Orleans, Jefferson and other parishes face similar problems. The entire region shares its origin from the Mississippi River. It is built on the river's natural levees, flood plains and back swamp. The New Orleans

Area 200 years ago was largely a "mosquito infested swamp." Man has drained and built up this "swamp" and with it has taken away much of its capacity to hold and drain storm water. Along with these changes, the last six years have brought large amounts of rainfall, during short periods of time, on three separate occasions. These rains have resulted in three "100 year floods" in a six year period.

Despite these conditions man has continued to develop the land. These floods serve as a warning that man must not exceed the land's bounds of development and inhabitation. These warnings need to be taken seriously. If St. Bernard desires to continue residential development it needs to pay the additional cost to improve its drainage or pay the cost of nature's wrath.

#### Accessibility As An Issue

The isolation of St. Bernard Parish from the rest of the metropolitan New Orleans area creates unique problems. St. Bernard's accessibility to the remainder of the metropolitan area is limited. All of the other parishes in the area are linked from east to west via I-10. St. Bernard lies south of this link. No such limited access expressway serves St. Bernard.

either live, work or have some need to go there. There The people who travel to and from St. Bernard Parish either live, work or have some need to go there. There is no benefit of traffic passing through or having ready access to do business there. The distinction can be viewed in either a positive or negative context. Many residents see the isolation as one of the parish's major appeals. It limits growth and serves to buffer residents from characteristics of city life which they sought to escape from.

Isolation also serves to limit the potential for economic growth. Isolation restricts growth in the retail sector and related areas of the economy. This occurs because retailers in the area can only draw upon the relatively small St. Bernard area as a marketplace. Major retail developments in Orleans and Jefferson Parish are able to draw from the entire metro area because they are readily accessible to virtually all points within it. This isolation has also resulted in St. Bernard not benefiting from the growth of the tourism business, which has thrived not only in New Orleans, but in Jefferson and St. Tammany through the construction of new hotels in these areas. St. Bernard's location also serves to deter the wholesale distribution sectors from locating there because of